

**REMARKS**

Claims 2-14 are pending in this application. Claims 2-14 are rejected. Claim 8 is herein amended. No new matter is added, the amendment finding support in the specification as filed. Attached hereto is a marked up version showing changes made to the claims.

**Rejection of Claims 2-14 under 35 U.S.C. 103(a)**

*Applicant's arguments filed October 1, 2002, to the rejection of claims 2-14 under 35 U.S.C. §103(a) as being unpatentable over Nakane et al., 5,122,418, and further in view of Peterson et al., 6,004584, have been fully considered, however the arguments are not deemed persuasive and the rejection has been maintained.*

Although the Examiner concedes that Nakane et al. does not specifically teach the specific construction of layers as claimed instantly, the Examiner insists that it would be obvious to one having ordinary skill in the art to modify the combined teachings of Nakane et al. and Peterson et al. to arrive at the instantly claimed invention.

Applicant respectfully disagrees with this rejection, because there does not appear to be shown a suggestion to create the claimed invention. Applicant understands that in order to establish a *prima facie* case of obviousness, three basic criteria must be met. First, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Finally, there must be a reasonable expectation of success. The teaching or suggestion

to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicant's disclosure. (MPEP §2142).

The Examiner asserts that Nakane et al. teaches hydroxyapatite, zinc oxide and aluminum hydroxychloride as a preferred active deodorizing ingredient. The Examiner asserts that the "selection of *any order of mixing* ingredients is obvious, particularly when the specified ingredients hydroxyapatite, zinc oxide, and aluminum hydroxychloride are taught to be the preferred active deodorizing ingredients", and refers to MPEP 2144.04, IV and 2144.06 as evidence of such rules.

Applicant notes that the "any order" rule cited by the Examiner in his statement would be applicable to a mixture or a process involving an addition of ingredients to a mixture in which all the ingredients are added and mixed to obtain a composite, and in which the same mixture results regardless of the order of addition. However, such a rule is not applicable in the present invention. Present claim 2 defines a structural limitation; i.e., a core substance, a hydroxyapatite layer on the surface of said core, and a zinc oxide layer on the hydroxyapatite; it does not claim an ordered addition to a mixture. It is not directed to a mere order of addition of components to a mixture that would result in the same mixture regardless of the order of addition. Therefore, such argument is not applicable to the present invention.

Furthermore, on closer inspection of Nakane et al., Applicant notes that while Nakane et al. discloses the use of two elements from the group consisting of core substances, hydroxyapatite, and zinc oxide, in no instance does Nakane et al. disclose the use of all three elements. Further, in examples where Nakane et al. discloses the use of zinc oxide or bactericide, it is mixed in a composite particle, and not used as an exterior coating on a particle. Applicant notes that Examples

15 and 20 of Nakane et al. include a base (talc), hydroxyapatite, and a bactericide. However, in both of these examples, all ingredients (except perfume) are blended at the same time in a mixer, in order to form a particle. Such treatment does not teach or suggest layering of different particles on other particles. Rather, a composite blend is created from such process. Therefore, Applicants note that there is no suggestion to have particles comprising layers of any order, let alone the specifically claimed order.

With reference to the secondary reference, Applicant notes that Peterson et al. appears to merely teach a mixture of zinc oxide with a powder. However, it does not teach a particle having a layered coating of zinc oxide over a powder, as the Examiner suggests. Therefore, even the combination of Nakane et al. and Peterson et al. would not have taught or suggested the present invention to one skilled in the art.

Even if such a combination did suggest the present invention, Applicant has submitted, in the Response filed April 12, 2002, evidence of unexpected results of the present invention over those taught by Nakane et al. and Peterson et al. It does not appear that the Examiner has commented on the experimental results. Such results may rebut the establishment of a *prima facie* rejection of obviousness; however, as Applicant noted, there does not appear to be a *prima facie* case of obviousness to rebut.

*Claims 2-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakane et al.,*

*as applied to claims 2-6 and 9-14 above, and further in view of Kaji et al., JP 11-140819.*

*Applicant notes that this apparently should be a rejection of "claims 7 and 8", rather than "2-14"). Applicant will therefore address the rejection as if it rejected claims 7 and 8.*

Applicant respectfully disagrees with the rejection, because there does not appear to be a suggestion to combine the cited references to reach the claimed invention. Applicant submits that the above arguments against the primary references are sufficient to overcome the rejections of the dependent claims.

Furthermore, the following comments are provided. Applicant notes that the present invention relates to a powder wherein the hydroxyapatite is layered directly on the base substance (core powder), and the zinc oxide is layered directly on the hydroxyapatite. In the Kaji et al. reference, such powder having specified three layers is neither disclosed nor suggested anywhere. Specifically, the Kaji et al. reference related to plate crystal hydroxyapatite for use in cosmetics.

Further, Applicant notes the additional description in Kaji et al. translation, paragraph 20, as follows:

“Namely, the various cosmetics materials (for example, titanium oxide –) which used plate crystal HAP as nucleus A mica, zinc oxide, sericite, talc, an alumina, a calcium carbonate, ...The effect as mixture that composite-izing (covering) of the plate crystal HAP which used various or cosmetics materials, such as metallic-soap processing, lecithin processing, polyethylene processing, the fluoridization, amino acid processing, and collagen processing, as the nucleus is also the same is acquired.”

In view of the above, Applicant asserts that Kaji et al. discloses that hydroxyapatite having specific form is used, and suggests additionally that one or more components selected from above many components (such as titanium oxide or the like) may be used. Therefore, in Kaji et al., such

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claimed powder having specified three layers as in the present invention is neither disclosed nor suggested.

For at least the above reasons, Applicant respectfully submits that the claimed invention is patentably distinct from the cited references. Applicant requests withdrawal of the rejections and passage of the claims to issue.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicant's undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicant respectfully petitions for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees that may be due with respect to this paper to Deposit Account No. 01-2340.

Respectfully submitted,

ARMSTRONG, WESTERMAN & HATTORI, LLP



Kenneth H. Salen  
Attorney for Applicant  
Reg. No. 43,077

KHS/kas  
Atty. Docket No. **010830**  
Suite 1000, 1725 K Street, N.W.  
Washington, D.C. 20006  
(202) 659-2930



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Enclosures: Version with markings to show changes made

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**Version with Markings to Show Changes Made**

**IN THE CLAIMS:**

**Please amend claim 8 as follows:**

8. (Three times amended) The powder as defined in claim 2, wherein said substance is in the shape of a scale, a plate, a lamella or a bar.